

DAY - 17

SEAT NUMBER

2009

III

20

1100

V - 338

(E)

MECHANICAL MAINTENANCE
PAPER - II (A-2)

Time : 2½ Hours

3 Pages

Max. Marks : 40

- Instructions :**
- (1) All questions are compulsory.
 - (2) Figures to the right indicate full marks.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Use of drawing instruments, mathematical tables etc. is permitted.
 - (5) Assume suitable data, if necessary.

1. Answer the following : (Any Four)

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Fill in the blanks using appropriate words out of those given below :

- (a) Piston Pin connects piston to _____.
 - (i) Cam Shaft
 - (ii) Fly Wheel
 - (iii) Crank Shaft
- (b) Air Vessels are used in _____ Pump.
 - (i) Centrifugal
 - (ii) Gear
 - (iii) Reciprocating
- (c) _____ is used to connect two pipes at right angles.
 - (i) Elbow
 - (ii) Nipple
 - (iii) Plug

State True or False and correct it, if False :

- ✓ (d) Reciprocating Pump needs priming.
- (e) Spur Gears have their teeth parallel to the centre line of Gear.
- (f) Cam Shaft is used to store energy.

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2. Answer the following : (Any Two)

- (a) Distinguish between Petrol Engine and Diesel Engine.
- (b) Describe Muff Coupling with a neat sketch.
- (c) Draw a labelled diagram of Reciprocating Pump.

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3. Answer the following : (Any Two)

- (a) What are the different types of Impellers ? Describe any one with neat sketch.
- (b) Describe a Screw Jack with neat sketch.
- (c) Sketch and explain Rack and Pinion.

4. Answer the following : (Any Three)

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- (a) Write a short note on Connecting Rod.
- (b) What are the reasons for Failure of Bearing ?
- (c) What are the purposes of Overhauling ?
- (d) State the causes of Vibration.
- (e) What are the uses of Compressed Air ?

5. Answer the following in short : (Any Three)

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- (a) Describe the reducing socket with neat sketch.
- (b) Explain the necessity of Foundation.
- (c) What are the different material handling devices used in industry ?
- (d) State the functions of Carburettor.
- (e) What are the safety precautions to be taken while working on Lathe ?

6. Answer the following : (Any Two)

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- (a) Explain the construction and working of 4 stroke petrol engine with neat sketch.
 - (b) Differentiate between Centrifugal Pump and Reciprocating Pump.
 - (c) What are the different methods of Lubrication ? Explain any two methods with neat sketches.
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